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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,235	10/01/2003	John R. Allen	Allen-003	6408
26604	7590	07/19/2005	EXAMINER	
KENNETH L. NASH P.O. BOX 680106 HOUSTON, TX 77268-0106			KERNS, KEVIN P	
			ART UNIT	PAPER NUMBER

1725

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,235

Applicant(s)

ALLEN, JOHN R.

Examiner

Kevin P. Kems

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005 and 13 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Oath/Declaration

1. The examiner acknowledges the applicant's new oath/declaration (which now includes the inventor's full given name), received by the USPTO on April 27, 2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4-6, 11-15, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowman (US 2,716,691).

Bowman discloses a method and apparatus for welding metallic tubing (such that the tubing is inherently capable of holding a volume of gas/liquid under pressure), in which the method and apparatus includes providing a first high energy source (non-consumable thoriated tungsten, or TIG electrode 19, for depositing an initial elongate weld bead having a crowned lower surface along the length of a moving workpiece surface 10 – see Figure 1); and providing a second high energy source (TIG electrode 15 aligned with and spaced at a fixed distance from the first high energy source and

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operable to melt a portion of the initial elongate bead to produce a smooth conditioned weld bead along the length of the tubular workpiece surface 10 – see Figures 1-5), such that the radial distance (extending outwardly from the workpiece) of the conditioned weld bead is less than that of the initial weld bead, while the conditioned weld bead width becomes greater than the initial weld bead width (during the process of monitoring and conditioning quality of the weld), with the initial elongate bead having cooled to the point of solidification (i.e. sufficient distance between electrodes 15,19) by the time it comes under the arc provided by electrode 15 (column 1, lines 52-72; column 2, lines 1-24 and 67-72; column 3, line 1 through column 5, line 38; and Figures 1-12).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 7-10, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman (US 2,716,691) in view of Beyer et al. (US 5,821,493).

Bowman discloses the features of claims 1, 6, and 13 above. Bowman does not disclose the use of a laser beam welder as the first (initial) high energy source.

However, Beyer et al. disclose a hybrid laser and arc process and system for welding workpieces, in which the process/system includes providing a laser beam welder 14 as a first (initial) energy source (Figure 3) to create a weld seam 12, and one or more TIG electrodes (15,16), such that providing a laser beam welder as one of the high energy sources is advantageous for obtaining higher speeds at reduced power, higher efficiency, low operating costs, and the ability to bridge even larger gaps between workpieces to be welded (abstract; column 1, lines 13-17 and 46-67; column 2, lines 1-67; column 3, lines 1-67; column 4, lines 1-20 and 57-67; column 5, line 1 through column 8, line 23; and Figures 1-8).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the method and apparatus for welding metallic tubing, as disclosed by Bowman, by using a laser beam welder as the first high energy source, as taught by Beyer et al., in order to obtain higher speeds at reduced power, higher efficiency, low operating costs, and the ability to bridge even larger gaps between workpieces to be welded (Beyer et al.; column 2, lines 8-23 and 48-57).

Response to Arguments

6. The examiner acknowledges the applicant's amendment and the new oath/declaration received by the USPTO on April 27, 2005 and June 13, 2005. The new oath/declaration is approved (see paragraph 1). The amendments to the abstract and specification overcome the prior objections and 35 USC 112, 2nd paragraph rejections

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set forth in paragraphs 2-6 of the prior Office Action. The applicant's amendments to the claims overcome the prior art rejections based on Persson et al. and Shimada et al., since these references include additional metal filler, instead of only metal from the tubular or workpiece. Claims 1-20 remain under consideration in the application.

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

With regard to the applicant's remarks/arguments pertaining to the Beyer et al. reference on pages 13 and 14, in particular in response to the applicant's argument that the laser and TIG welder of Beyer et al. must be very close together, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this instance, use of the laser beam welder as one of the high energy sources, as disclosed by Beyer et al., is advantageous for obtaining higher speeds at reduced power, higher efficiency, low operating costs, and the ability to bridge even larger gaps between workpieces to be welded.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,054,667 is also cited in PTO-892.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin P. Kerns *Kevin Kerns 7/16/05*
Primary Examiner
Art Unit 1725

KPK
kpk
July 16, 2005